

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

In the Claims

1-73. (Cancelled)

74. (Currently amended) A balloon catheter having a proximal end and a distal end, comprising

a catheter shaft;

a balloon having a proximal end and a distal end, the balloon disposed on the catheter shaft such that a length of the catheter shaft extending between the proximal end of the catheter shaft and the proximal end of the balloon has no balloons attached thereto,

~~A component of a catheter shaft,~~ wherein ~~the component of~~ the catheter shaft includes a region that comprises a polyamide having a tensile strength of at least about 21,000 psi, wherein the region ~~of the component~~ is tube-shaped and has a wall thickness of about 0.001 inch to about 0.04 inch, wherein the region is at least partially disposed proximally of the proximal end of the balloon.

75-76. (Cancelled)

77. (Currently amended) The balloon catheter component of claim 74, wherein the ~~component~~ region comprises a first layer and a second layer, the first layer having a different flexibility from the second layer.

78. (Currently amended) The balloon catheter component of claim 74, wherein the tensile strength of the polyamide is at least about 22,500 psi.

79. (Currently amended) The balloon catheter component of claim 74, wherein the polyamide has a hoop stress of at least about 3300 psi.

80. (Currently amended) A tube-shaped portion of a catheter shaft, the tube-shaped portion including a region comprising a polyamide having a tensile strength of at least about 21,000 psi, the region having a wall thickness of about 0.001 inch to about 0.04 inch, wherein the tube shaped portion is not a component of a balloon.

81. (Original) The tube-shaped portion of claim 80, wherein the tube-shaped portion comprises a first layer and a second layer, the first layer having a different flexibility from the second layer.

82. (Previously presented) The tube-shaped portion of claim 80, wherein the tensile strength of the polyamide is at least about 22,500 psi.

83. (Previously presented) The tube-shaped portion of claim 80, wherein the polyamide has a hoop stress of at least about 3300 psi.

84. (Currently amended) A balloon catheter having a proximal end and a distal end, comprising

a catheter shaft;

a balloon having a proximal end and a distal end, the balloon disposed on the catheter shaft such that a length of the catheter shaft extending between the proximal end of the catheter shaft and the proximal end of the balloon has no balloons attached thereto,

A component of a catheter shaft, wherein the component of the catheter shaft includes a region that comprises a polyamide having a hoop stress of at least about 3300 psi, wherein the region of the component is tube-shaped and has a wall thickness of about 0.001 inch to about 0.04 inch, wherein the region is at least partially disposed proximally of the proximal end of the balloon.

85-86. (Cancelled)

87. (Currently amended) The balloon catheter ~~component~~ of claim 84, wherein the region ~~component~~ comprises a first layer and a second layer, the first layer having a different flexibility from the second layer.

88. (Currently amended) The balloon catheter ~~component~~ of claim 84, wherein the hoop stress of the polyamide is at least about 3500 psi.

89. (Currently amended) A tube-shaped portion of a catheter shaft, the tube-shaped portion including a region that comprises a polyamide having a hoop stress of at least about 3300 psi, the region having a wall thickness of about 0.001 inch to about 0.04 inch, wherein the tube shaped portion of the catheter shaft is not a component of a balloon.

90. (Original) The tube-shaped portion of claim 89, wherein the tube-shaped portion comprises a first layer and a second layer, the first layer having a different flexibility from the second layer.

91. (Previously presented) The tube-shaped portion of claim 89, wherein the hoop stress of the polyamide is at least about 3500 psi.

92-129. (Cancelled)

130. (Currently amended) The balloon catheter ~~component~~ of claim 74, wherein the polyamide comprises a copolymer.

131. (Previously presented) The tube-shaped portion of a catheter of claim 80, wherein the polyamide comprises a copolymer.

132. (Currently amended) The balloon catheter ~~component~~ of claim 84, wherein the polyamide comprises a copolymer.

133. (Previously presented) The tube-shaped portion of a catheter of claim 89, wherein the polyamide comprises a copolymer.

134-139. (Cancelled)

140. (Currently amended) The balloon catheter ~~component~~ of claim 74, wherein the region has a wall thickness of about 0.001 inch to about 0.003 inch.

141. (Previously presented) The tube-shaped portion of a catheter shaft of claim 80, wherein the region has a wall thickness of about 0.001 inch to about 0.003 inch.

142. (Currently amended) The balloon catheter ~~component~~ of claim 84, wherein the region has a wall thickness of about 0.001 inch to about 0.003 inch.

143. (Previously presented) The tube-shaped portion of a catheter shaft of claim 89, wherein the region has a wall thickness of about 0.001 inch to about 0.003 inch.

144. (New) The balloon catheter of claim 74, wherein the region defines a distal inner lumen that extends through the balloon.

145. (New) The balloon catheter of claim 144, wherein the distal inner lumen is a guide wire lumen.

146. (New) The balloon catheter of claim 74, further comprising a guide wire hub and wherein the region is a mid-shaft portion having a proximal end longitudinally separated from the guide wire hub and a distal end longitudinally separated from the balloon.

147. (New) The balloon catheter of claim 74, wherein the region defines a lumen in fluid communication with the balloon for carrying inflation fluid.

148. (New) The balloon catheter of claim 74, wherein the region defines an outer wall of the catheter shaft.

149. (New) The balloon catheter of claim 148, wherein the region is attached to a proximal waist of the balloon.

150. (New) The balloon catheter of claim 74, wherein the region as a wall thickness of about 0.003 inch to about 0.04 inch.

151. (New) The balloon catheter of claim 80, wherein the region as a wall thickness of about 0.003 inch to about 0.04 inch.

152. (New) The balloon catheter of claim 84, wherein the region as a wall thickness of about 0.003 inch to about 0.04 inch.

153. (New) The balloon catheter of claim 89, wherein the region as a wall thickness of about 0.003 inch to about 0.04 inch.